

The 11<sup>th</sup> International Seminar & Conference on  
**Advances in Resistance Welding and Mechanical Joining**  
9-11 October 2024, Shanghai, China

**第十一届先进电阻焊及机械连接技术国际会议**

2024 年 10 月 9 日至 11 日，中国上海

**ANNOUNCEMENT**

**通告**

**Organizers / 主办方:**

SWANTEC Software and Engineering ApS, Denmark

Shanghai Infomass Information Technology Co., Ltd., China

Shanghai Key Laboratory of Digital Manufacture for Thin-Walled Structures, Shanghai Jiao Tong University, China

/ 丹麦 SWANTEC 软件及工程公司

/ 上海信聚信息技术有限公司

/ 上海交通大学上海市复杂薄板结构数字化制造重点实验室

**Background/ 背景:**

The rapid development of electric vehicles (EVs) is reshaping the automotive industry. The transition to E-mobility poses new challenges for the welding and joining of battery cells, modules and packs, as well as electric motors and power electronics. The need for reducing CO<sub>2</sub> emissions and improving vehicle performance has promoted the application of lightweight materials such as higher-strength steels, aluminum alloys, die-cast aluminum, and dissimilar materials.

These trends require new developments and production of more advanced materials with higher strength-to-weight ratios, and also have complicated the welding and joining processes requiring more intelligent welding process optimizations and sophisticated weld quality assurance.

To keep up to date with technology advancements in the field of resistance welding and mechanical joining, and to provide an opportunity for industrialists and welding specialists to share their expertise, experiences and outlooks at an international level, a series of biennial international seminars has been organized by SWANTEC since 2000 in collaborations with various co-organizing partners alternatively in Europe, North America and Asia.

电动汽车 (EVs) 的快速发展正在重塑汽车产业。向电动出行的转变对电池单元、模组和电池包以及电动机和电力电子器件的焊接和连接提出新挑战。同时，减少 CO<sub>2</sub> 排放和改善车辆性能的需求也促进了高强钢、铝合金、压铸铝及铝钢异质材料的应用。

这种趋势使焊接和连接过程变得更加复杂，需要更智能的焊接过程优化和焊缝质量保障方法。

为了促进电阻焊和机械连接领域的技术进步，并为工业界人士和焊接专家提供一个分享创新成果和技术发展趋势的国际交流平台，自 2000 年以来，SWANTEC 公司与欧洲、北美和亚洲的不同合作伙伴轮流组织了一系列两年一次的国际研讨会。第 11 届研讨会将于 2024 年在中国上海举行。

The 11th seminar will be held in 2024 in Shanghai, China.

## Topics / 主题:

- E-Mobility transformations and its challenges to welding and joining.  
新能源出行在焊接与铆接领域带来的转型及挑战
- Light-weight designs and assemblies with AHSS, die-casting aluminum, dissimilar materials.  
基于超高强钢、压铸铝、异质材料的轻量化结构设计和装配
- Welding and joining of battery cells, modules and packs.  
电池单元、电池模组和电池包的焊接和连接
- Welding and joining of powertrain and power electronics.  
传动系统和电力电子器件的焊接和连接
- Digitalization of welding, simulations, digital twins and AI.  
焊接过程数字化, 数值模拟、数字孪生和人工智能
- Welding process monitoring and weld quality inspections.  
焊接过程监控和焊接质量检测
- Welding equipment, machines, and adaptive controls.  
焊接设备、机器及其自适应控制
- Electrode materials, tip dressing, and tooling techniques.  
电极材料、电极修磨和工具技术
- Mechanical joining (SPR and clinching) and hybrid joining techniques.  
机械连接 (SPR 和 clinching) 和复合连接技术

## Language/ 大会语言:

All papers and presentations will be in English.

所有论文和演示将使用英文进行。

## Important dates / 重要日期:

<b>Deadline for submission of title and abstract (1 page):</b>	<b>– 31 May 2024</b>
标题和摘要提交截止日期 (1 页) :	– 2024 年 7 月 31 日
<b>Deadline for submission of full paper (8–12 pages):</b>	<b>– 31 July 2024</b>
全文提交截止日期 (8–12 页) :	– 2024 年 7 月 31 日
<b>Seminar and conference dates:</b>	<b>– 9–11 October 2024</b>
大会会议日期:	– 2024 年 10 月 9–11 日

## Previous seminars / 往届大会:



- 1<sup>st</sup>: Oct 2000, Copenhagen, Denmark

第一届：2000 年 10 月 丹麦 哥本哈根



- 2<sup>nd</sup>: Nov 2002, Aachen, Germany

第二届：2002 年 11 月 德国 亚琛



- 3<sup>rd</sup>: Nov 2004, Berlin, Germany

第三届：2004 年 11 月 德国 柏林



- 4<sup>th</sup>: Nov 2006, Wels, Austria

第四届：2006 年 11 月 奥地利 韦尔斯



- 5<sup>th</sup>: Sept 2008, Toronto, Canada

第五届：2008 年 9 月 加拿大 多伦多



- 6<sup>th</sup>: Sept 2010, Hamburg, Germany

第六届：2010 年 9 月 德国 汉堡

I-S KOREA CO.,LTD



- 7<sup>th</sup>: Sept 2012, Busan, Korea

第七届：2012 年 9 月 韩国 釜山

- 8<sup>th</sup>: Sept 2014, Baveno, Italy

第八届：2014 年 9 月 意大利 巴韦诺



- 9<sup>th</sup>: Apr 2016, Miami, USA (American Welding Society)

第九届：2016 年 4 月 美国 迈阿密 (美国焊接学会)

Hochschule Esslingen  
University of Applied Sciences

For people and technology.

- 10<sup>th</sup>: Sept 2018, Esslingen, Germany

第十届：2018 年 9 月 德国 埃斯林根



## Previous Participants / 往届参会单位:

- |                        |                                     |                                   |
|------------------------|-------------------------------------|-----------------------------------|
| • Audi (Germany)       | • BOSCH (Germany)                   | • ArcelorMittal (France, USA)     |
| • BMW (Germany)        | • Amada (Germany)                   | • BaoSteel (China)                |
| • Daimler (Germany)    | • Fronius (Austria)                 | • JFE Steel (Japan)               |
| • FIAT (Italy)         | • Harms-Wende (Germany)             | • Nippon Steel (Japan)            |
| • Ford (USA)           | • KUKA (Germany)                    | • POSCO (Korea)                   |
| • GM (USA)             | • Aachen University (RWTH, Germany) | • SSAB (Sweden)                   |
| • Hyundai (Korea)      | • Dong-Eui University (Korea)       | • TATA Steel Europe (NL)          |
| • Opel (Germany)       | • Ohio State University (USA)       | • ThyssenKrupp Steel (Germany)    |
| • Toyota (Japan)       | • University of Waterloo (Canada)   | • US Steel (USA)                  |
| • Volkswagen (Germany) | • The Welding Institute (TWI-UK)    | • Danfoss (Denmark)               |
| • Volvo (Sweden)       | • American Welding Society (AWS-US) | • Technical University of Denmark |
| Etc.                   |                                     |                                   |

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**PRELIMINARY PROGRAM**

**会议议程**

Wednesday, 9 October 2024 / 2024 年 10 月 9 日，星期三：

11:00 – 12:00	Registration / 注册	
12:00 – 13:00	Lunch / 午餐	
13:00 – 15:00	<b>Workshop on SORPAS® with the latest developments / SORPAS 最新技术研讨会</b> New versions of SORPAS 2D and 3D and case studies 新版 SORPAS 2D 和 3D 以及案例研究	– Open to all participants --对所有参会人员开放
15:00 – 15:30	Coffee break / 茶歇	
15:30 – 17:00	<b>SORPAS® User Group Meeting / SORPAS® 用户大会</b> Presentations and discussions with SORPAS users SORPAS 用户的使用、案例演讲及交流	– Open to all participants --对所有参会人员开放
18:00 – 20:00	Welcome Reception / 欢迎酒会	

Thursday, 10 October 2024 / 2024 年 10 月 10 日，星期四：

08:30 – 09:00	Registration / 大会报到注册	
09:00 – 09:10	Welcome / 欢迎致辞	
09:10 – 10:00	<b>Keynote speech (Prof. Yongbing LI, Shanghai Jiao Tong University)</b> <b>主旨演讲</b>	
10:00 – 10:30	Coffee break / 茶歇	
10:00 – 12:00	<b>Session 1: Light-weight designs and welding of AHSS and aluminums</b> <b>第 1 场：高强钢和铝合金轻量化设计及焊接技术</b>	
12:00 – 13:00	Lunch / 午餐	
13:00 – 15:00	<b>Session 2: Electrical vehicles, Battery welding and electrical assembly</b> <b>第 2 场：电动车，电池焊接和电子装配</b>	
15:00 – 15:30	Coffee break / 茶歇	
15:30 – 17:00	<b>Session 3: Digitalization of welding, simulations, digital twins and AI</b> <b>第 3 场：焊接数字化，数值模拟、数字孪生和人工智能</b>	
19:00 – 22:00	Conference Dinner / 大会晚宴	

Friday, 11 October 2024 / 2024 年 10 月 11 日，星期五：

09:00 – 10:30	<b>Session 4: Welding machines, electrodes, and control technologies</b> <b>第 4 场：焊接设备，电极以及控制技术</b>	
10:30 – 11:00	Coffee break / 茶歇	
11:00 – 12:00	<b>Session 5: New joining techniques, mechanical joining, and hybrid joining</b> <b>第 5 场：新连接技术，机械连接，复合连接等</b>	

**12:00 – 14.00      *Lunch and Closing Remarks / 午餐及大会闭幕致辞***

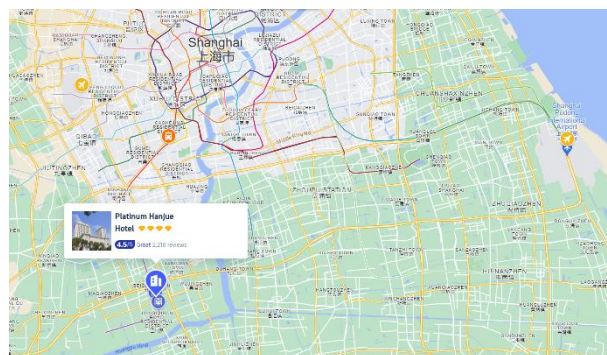
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**VENUE INFORMATION**

**会议地点**



**Conference Venue and main Hotel / 大会地点及主酒店:**

**Platinum Hanjue Hotel (Shanghai) / 上海闵行白金汉爵大酒店**

No.1577 Humin Road, Minhang District, Shanghai, China / 上海市闵行区沪闵路 1577 号

+86 21 3185 8888

**Transportation / 交通指南:**

Transportation around the city is convenient with Jiansuan Road Metro Station within walking distance.

从上海市区有便利的公共交通到达，地铁 5 号线剑川路站步行可至。

- |   |                             |
|---|-----------------------------|
| ✧ Shanghai (PVG – Pudong Intl. Airport)   | ~58 min(s) by car (55.0 km) |
| 上海浦东国际机场                                  | – 驾车约 58 分钟 (55.0 公里)       |
| ✧ Shanghai (SHA – Hongqiao Intl. Airport) | ~42 min(s) by car (22.6 km) |
| 上海虹桥国际机场                                  | – 驾车约 42 分钟 (22.6 公里)       |
| ✧ Shanghai Hongqiao Railway Station       | ~42 min(s) by car (22.6 km) |
| 上海虹桥高铁站                                   | – 驾车约 42 分钟 (22.6 公里)       |
| ✧ Shanghai Railway Station                | ~60 min(s) by car (29.7 km) |
| 上海火车站                                     | – 驾车约 60 分钟 (29.7 公里)       |
| ✧ Jiansuan Road Metro Station (Line 5)    | ~7 min(s) by foot (470m)    |
| 地铁 5 号线剑川路站                               | – 步行约 7 分钟 (470 米)          |

**Other Hotels nearby / 附近的酒店:**

**Huhua International Hotel (Jiansuan Road) No.**  
368 Jiansuan Road  
Minhang, Shanghai, China

**沪华国际大酒店(剑川路店)**

**Mehood Leslie Hotel (Dongchuan Road)**  
No. 499 Shiping Road  
Minhang, Shanghai, China

**美豪丽致酒店(交大东川路店)**

闵行区剑川路 368 号  
+86 21 6450 8999

闵行区石屏路 499 号  
+86 21 6435 6999

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REGISTRATION

注册

Participant / 参会者:

Name / 姓名: \_\_\_\_\_ ☐ Ms. ☐ Mr. ☐ Dr. ☐ Prof.  
Organization / 单位: \_\_\_\_\_  
Address / 地址: \_\_\_\_\_  
Postal or Zip / 邮编: \_\_\_\_\_ City / 城市: \_\_\_\_\_  
Country / 国家: \_\_\_\_\_  
Phone / 电话: \_\_\_\_\_ Fax / 传真: \_\_\_\_\_  
E-mail / 邮件: \_\_\_\_\_

Participation / 出席:

- ☐ Seminar & Conference / 研讨会和大会 €127 (Euro 欧元)  
(10-11 October 2024) CNY ¥1,000  
*All prices are exclusive of any applicable taxes and/or fees. 所有价格均不包括任何适用的税费。*
- ☐ SORPAS® Workshop (9 October 2024): Free / 免费

Payment / 支付方式:

- ☐ **Bank transfer in EUR** to SWANTEC Software and Engineering ApS  
Danske Bank, Erhverv Direkte, Holmens Kanal 2-12, 1092 Copenhagen, Denmark  
IBAN: DK6530004260599852. SWIFT: DABADKKK  
*Notice: Your name in the transfer reference is necessary for identification.*  
☐ Send invoice to me - for **EU countries only** - VAT registration number: \_\_\_\_\_
- ☐ **银行转账 (人民币)**  
**Bank transfer in CNY** to Shanghai Infomass Information Technology Co., Ltd.  
上海信聚信息技术有限公司  
开户银行: 华夏银行上海徐汇支行  
账号: 4333200001810200205644  
*注意: 转账信息注明您的名字、单位 / Notice: Your name in the transfer reference is necessary for identification.*  
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Please return to / 请回执给:

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Diplomvej 373  
DK-2800 Kongens Lyngby  
Denmark

E-mail: [info@swantec.com](mailto:info@swantec.com)

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[http://www.infomass.cn/about/2024\\_seminar](http://www.infomass.cn/about/2024_seminar)  
E-mail: [service@infomass.cn](mailto:service@infomass.cn)



